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10   **APPARATUS AND METHOD FOR RETRIEVAL OF DOCUMENTS**

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Button 'Go', 216, is used to indicate that the composition of the query is complete and the system is to retrieve information in accordance to that query.

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Documents section:

Document section 218 is used to display titles and summaries of documents in accordance to the highlighted Query in Related Queries section 204.

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Title window:

The titles of the documents are displayed in Title window 220 are titles that are highly related to the highlighted query of window 204, Query2 in the example of

15   Figure 2.

The titles are available from System Database 108 and are displayed in order .according to their ranking. High rank displayed first.

If the number of such titles is lower then No. of Titles 228 (20 in the example of Figure 2), the next group of titles is extracted from System Database 108. These

20   titles are related to the non-highlighted title with the highest rank in window 208. If this does not provide the required number of titles, the next group of titles is extracted from System Database 108. These titles are related to the non-highlighted title with the second highest rank in window 208. This procedure is repeated until the required number of titles is provided.

25   Each such group of titles is sub-sorted according to the rank of the titles.

Titles are also filtered for display by "Which Title?" window 232. In the example of Figure 2, only New titles are presented. These are titles that have not been reviewed yet by the present user. The filtering action of the preferences is

30   explained in more details hereinbelow, in the Preference section part.

A single click on a title of window 220 will effect the display of summaries in Summary window 222 as explained hereinbelow.

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Date Range 230 and documents that have been seen in the past by the
current user, as required by window 232 (step 336).

18. In step 338 the search results are displayed in windows 220 (titles) and 222
(summaries). Summaries of documents that are new to the database may be

5   extracts from the document by a variety of methods such as reading the
content of the relevant Meta Tag in an html file type or just reading the first
few lines of the document.

19. The user may select a summary and double click it (step 340).

20. The selected document is displayed in a dedicated window, such as a

10   Netscape browser window (step 342).

The user may view documents, step back to the search process modifying his
search activity in a variety of ways such as composing new queries, editing
queries and changing preferences of window 226.

15   Following predetermined conditions (such as every 10 minutes or end of search
session or every logout) System 100 is processing the new search information
and generates new data for System Database 108. This data is added to the
previously stored data for future aided search sessions, as described
hereinabove (section of Initial search process).

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Simple queries such as of one or two Key Terms are the most intuitive and are
frequently the first ones composed in a search session. In another embodiment of
the invention, the user may submit such a simple query that in a present art
search system will fail to produce useful results and provide many falls results. In

25   the present invention, submission of such a query will actually result in
submission of a number of more sophisticated queries, these are Related
Queries available from System Database 108. These queries may be those of a
rank above a predetermined threshold. The results will be those that are
associated with the highly ranked Related Queries. This method enables valuable

30   results from a simple and intuitive query - not effective by itself.

A method is presented hereinbelow, to associate such simple queries that, in
most cases, do not provide the desired results, with more sophisticated queries

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that are usually not intuitive and are composed only after few interactions with
search results and query modifications accordingly.

A search session is defined to be the process of searching information related to
a specific subject. A search session includes the composing of queries,

5   submission of queries to a search engine, evaluation of results, modification of
queries as a response to such search results, submission of such modified
queries - and so on.

Two sessions are different if the subject is different.

10   In the present embodiment of the invention, semi-automatic session tracing is
performed by the system. Queries are identified to belong to the same search
session in the following way:

New search session starts by a query (normally after the application is activated).
Each new or modified query is compared to all the previous queries. If at least

15   one keyword of this query is used in one of the previous queries of that session -
the new query is belongs of the same session.

If the user go through strategy change in his queries there may be no keyword
relation anymore to previous queries even if this is the same search session. For
example, a user may search for information on 35mm film dimensions. He may

20   start with a query "film and 35mm" and change strategy to search for standard
organizations with the query "iso". To overcome this problem in the present
embodiment, when this occurs, the system responds to the user with a question:
"Have you started a new search session? Y/N". If the user answers "N" the
queries "film and 35mm" and "iso" are associated with the same search session.

25   Next time that the query "film and 35mm" will be composed by a user, a reference
will also be made to the query "iso" as a relevant query. Useful titles retrieved by
the query "iso" will be available then also for the query "film and 35mm".

If the user replies "Y", the previous set of queries are associated with one search
session while the new query is the first one of the new search session.

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In yet another embodiment of the invention, the data that is collected and
processed trough the search sessions is used to generate and support direct

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It would be appreciated by those skilled in the art that efficiency of System 100 depends on the computers in use, communication networks and other device parameters.

5   The flow of process, as described hereinabove may be modified to suit less efficient devices by avoiding updating the windows of Figure 2 following any change in any window. Instead, update may be performed as a response to a predetermined partial group of changes or only by an explicit request from the user.

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It is also appreciated that non-Boolean query systems, such as Natural Language Queries, may be used in the present invention.

The hereinabove embodiments are described in a way of example and do does

15   not specify a limited the scope of the invention.

The scope of the invention is defined solely by the claims provided hereinbelow:

Claims:

1.   A method for retrieving a document for display on a computer, comprising the steps of:

associating a string of characters with the address of a document;

registering the string and the associated address in a database;

typing at least a part of said string in a window;

looking-up for said string in said database using said at least part of said string; and

displaying the document specified by said associated address.

2.   The method of claim 1 and; including the step in which the user types the string of characters in a query window of a search interface.

3.   The method of claim 1 whereas control characters are used to indicate that the string is generated composed for the purpose of

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associating association with an address of a document.

4. The method of claim 1 whereas control characters are used to indicate that a document referred to by the address associated with a said string should be open.

5. The method of claim 1 whereas a button is used to indicate that the string is generated composed for the purpose of associating association with an address of a document.

6. The method of claim 1 whereas a button is used to indicate that a document of the address associated with a string should be open.

7. An apparatus for search and retrieval of documents comprising a computer, a database and a directory;
said database contains at least one query in the form of at least one term;
said database is split to at least two sections;
each section is associated with an entry of said directory; and
by selecting an entry in said directory, the user also specifies the section of said database, and;

8. The apparatus of claim 7 including the step of updating only the specified database with keywords.

9. The apparatus of claim 7 including the step of updating only the specified database with queries.

10. The method described hereinabove.

11. The apparatus described hereinabove.

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The hereinabove embodiments are described in a way of example and do does
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The scope of the invention is defined solely by the claims provided hereinbelow:

Claims:

1.   A method for retrieving a document for display on a computer,
          comprising the steps of:
          associating a string of characters with the address of a document;
          registering the string and the associated address in a database;
          typing at least a part of said string in a window;
          looking-up for said string in said database using said at least part of
          said string; and
          displaying the document specified by said associated address.

2.   The method of claim 1 including the step in which the user types the
          string of characters in a query window of a search interface.

3.   The method of claim 1 whereas control characters are used to
          indicate that the string is composed for the purpose of association
          with an address of a document.

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4.   The method of claim 1 whereas control characters are used to indicate that a document referred to by the address associated with said string should be open.

5.   The method of claim 1 whereas a button is used to indicate that the string is composed for the purpose of association with an address of a document.

6.   The method of claim 1 whereas a button is used to indicate that a document of the address associated with a string should be open.

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